

# On Designing Open Access Mandates for Universities and Research Funders

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Slides for Promoting OA Mandates and Metrics

# What is OA?

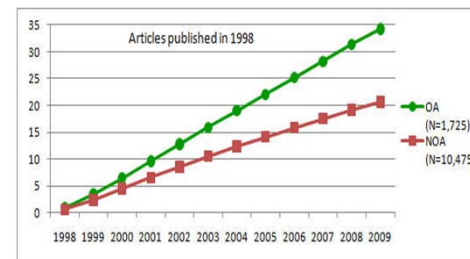
- Free
- Immediate
- Permanent
- Online
- Access

# Open access to what?

- 2.5 million articles
- Published yearly
- In 25,000 peer reviewed journals
- Across all scientific and scholarly disciplines
- In all countries and languages
- *Don't over-reach for open books, "open knowledge," "open information"*

# Why provide OA?

- Because it maximizes research uses and impact
- Making it accessible to all users
- Not just those who can afford to subscribe to the journal in which the article was published



# No North/South Differences in Users' and Authors' Need of OA

- OA maximized access for users
- OA maximizes impact for authors
- OA maximizes research progress

# How to provide OA?

## "green" and "gold" OA

1. GREEN OA: By publishing in any journal at all, but *self-archiving* a copy free for all on the web
1. GOLD OA: By publishing in a journal that makes its articles free for all on the web

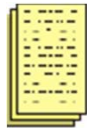
# Limited Access: Limited Research Impact

12-18 Months

Impact cycle begins:  
Research is done



Researchers write pre-refereeing "Pre-Print"



Submitted to Journal



Pre-Print reviewed by Peer Experts – "Peer-Review"



Pre-Print revised by article's Authors

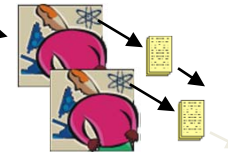
Refereed "Post-Print"  
Accepted, Certified, Published by Journal



Researchers can access the Post-Print if their university has a subscription to the Journal



New impact cycles:  
New research builds on existing research



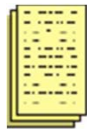
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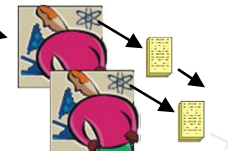
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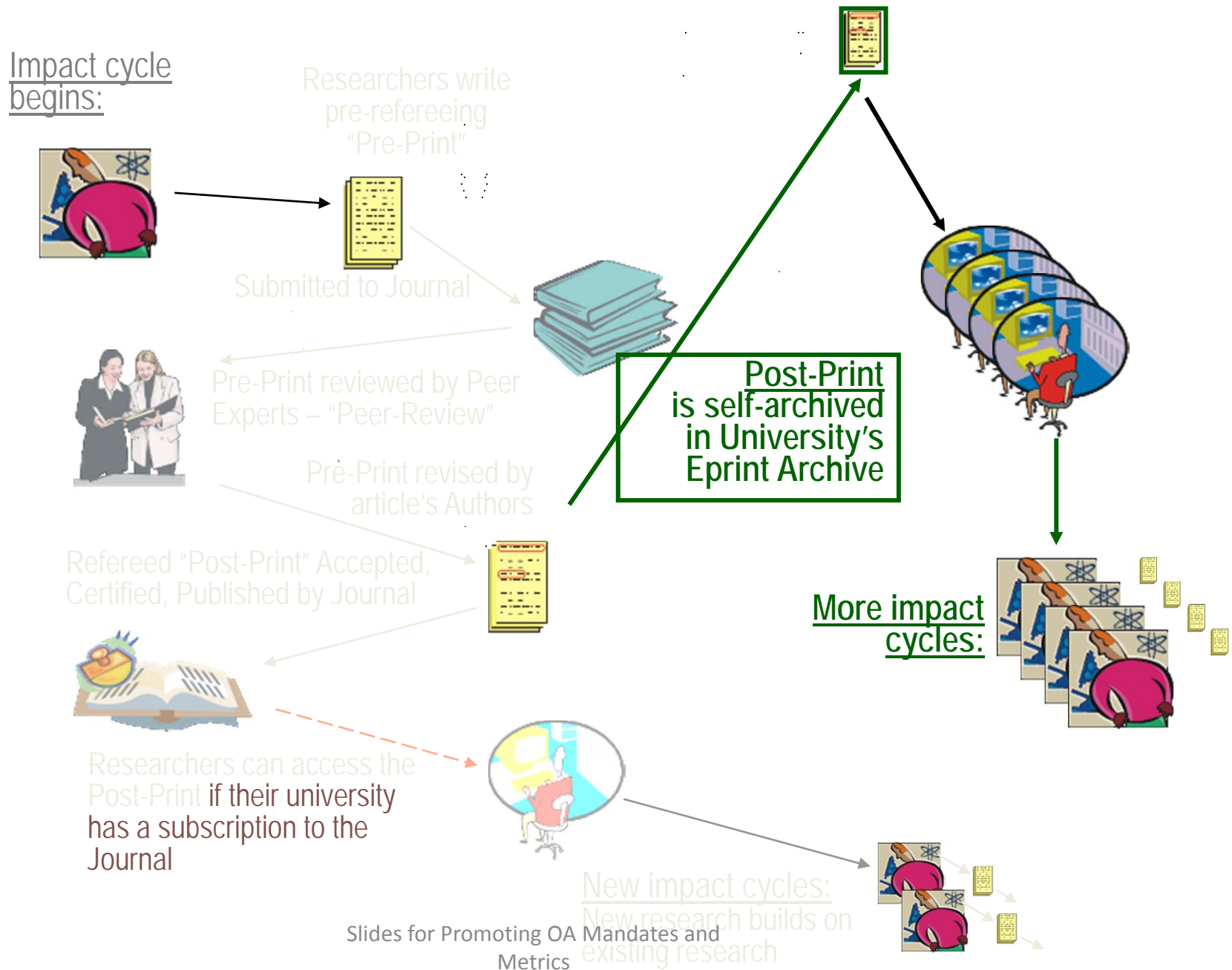


**This limited subscription-based access can be supplemented by self-archiving the Postprint in the author's own institutional repository as follows:**

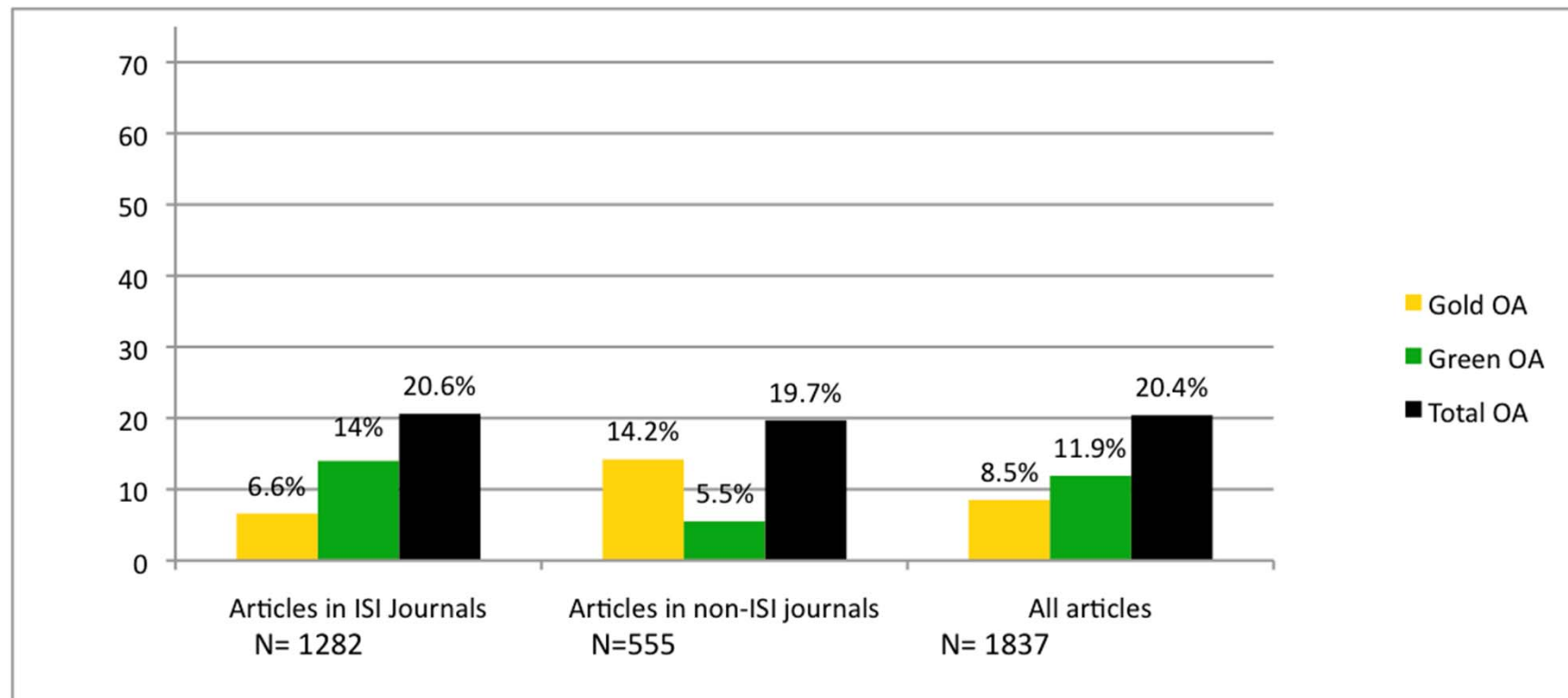


# Maximized Research Access and Impact Through Self-Archiving

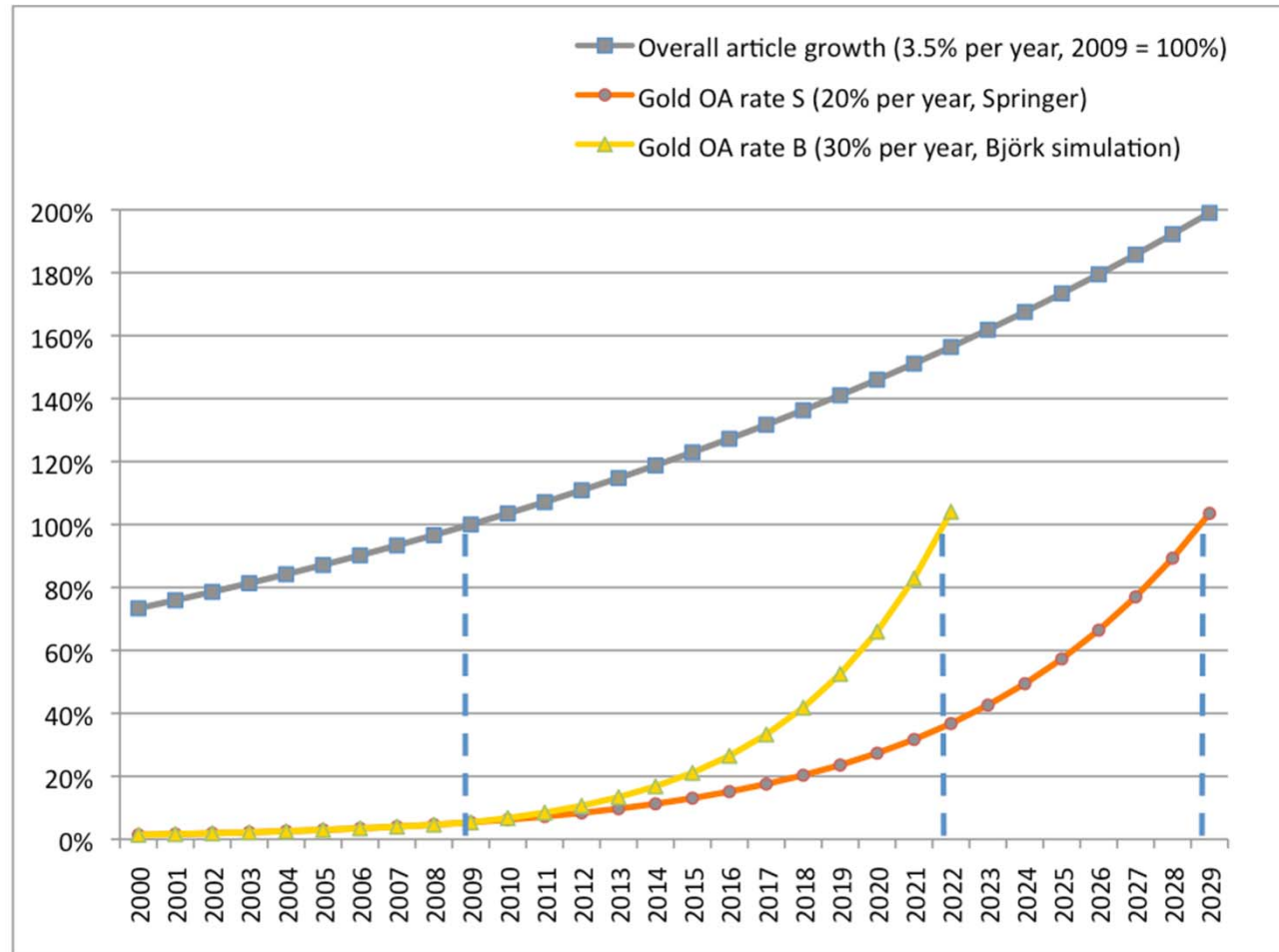
12-18 Months



# Bjork et al estimates of **green** and **gold** percentages (2009)

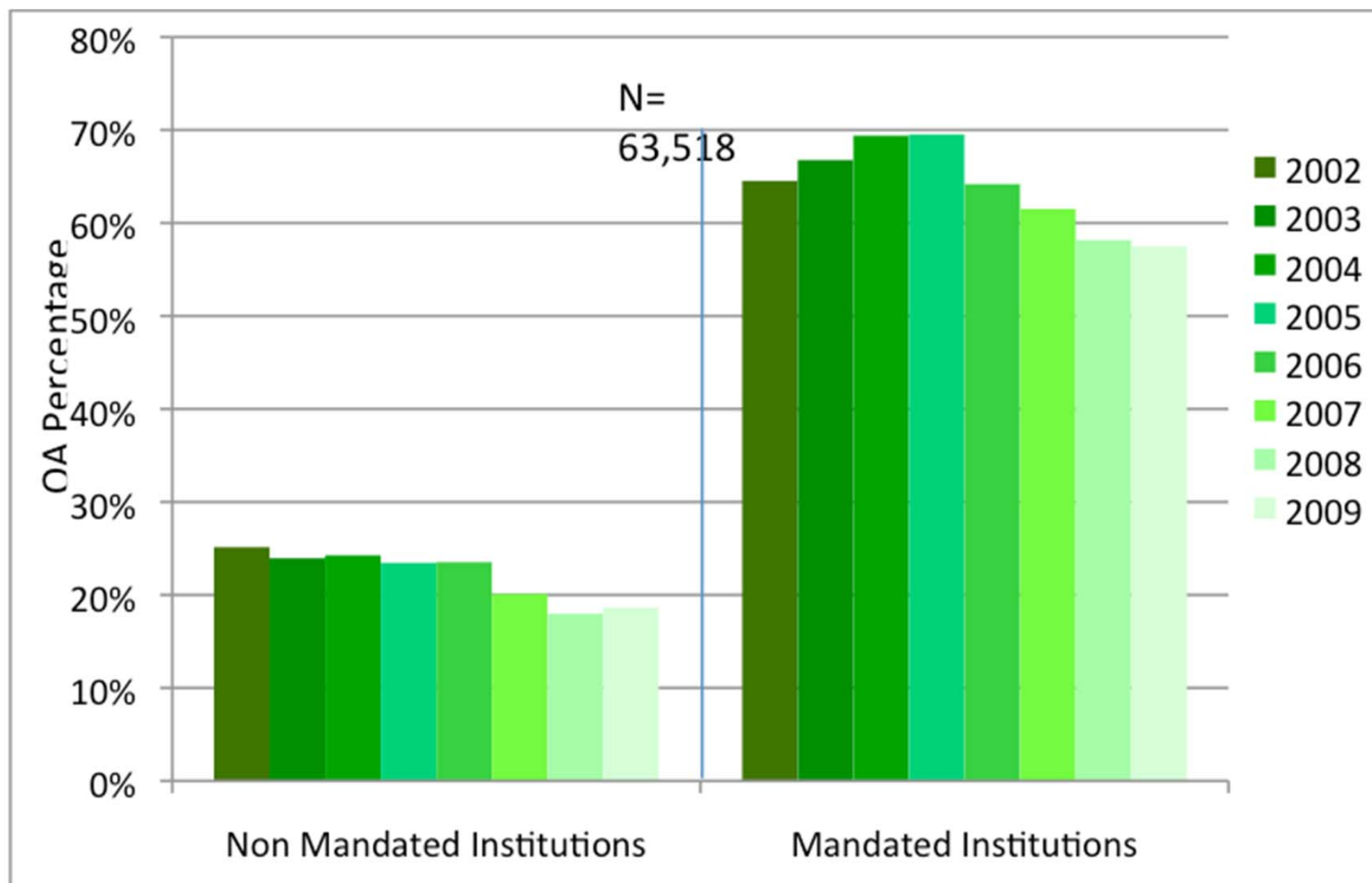


# Gold OA growth curve



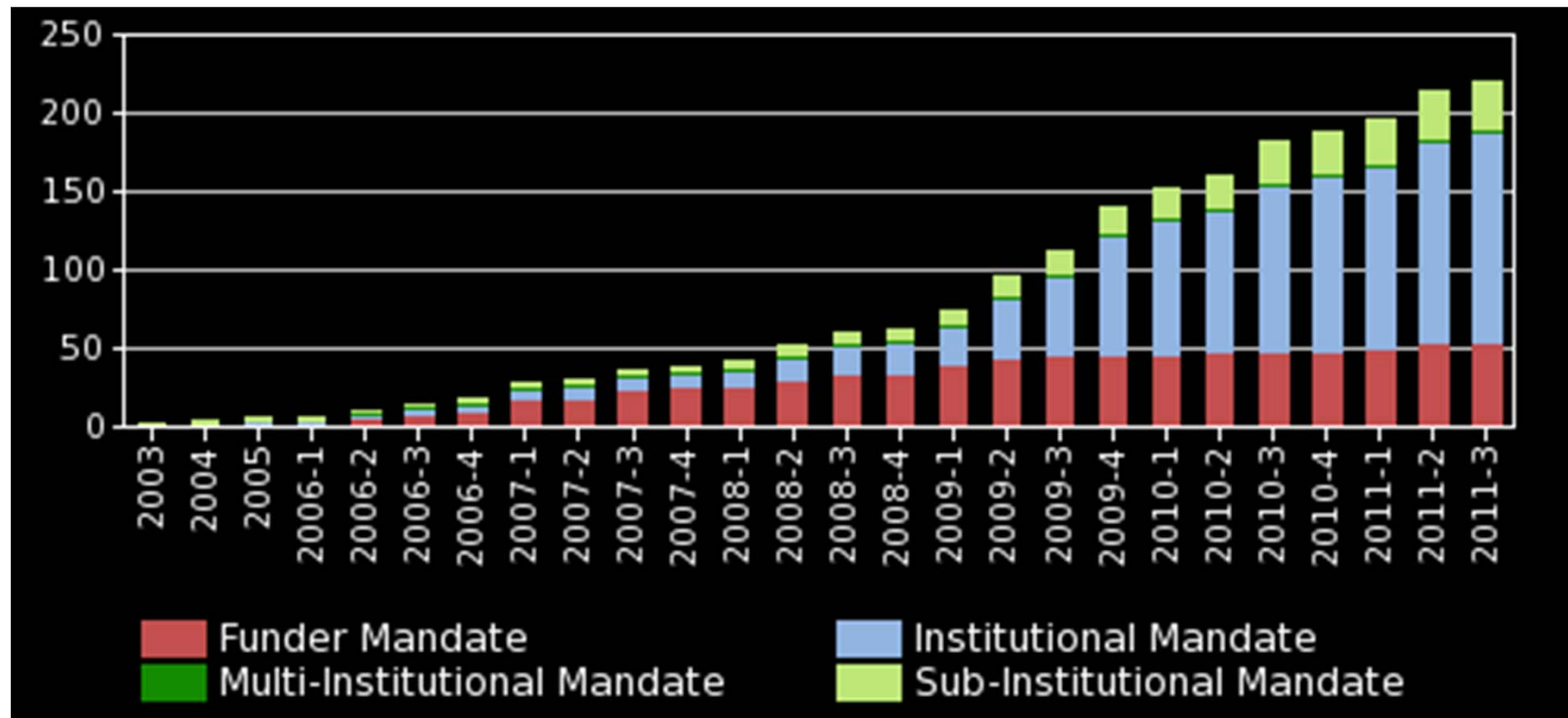
Slides for Promoting OA Mandates and Metrics

# Nonmandated vs mandated Green OA



# ROARMAP

## Green OA mandate growth



# Why does green OA need to come before gold OA?

1. Because green OA can be provided by the research community and gold OA can only be provided by the publisher community
2. Because green OA can be mandated by research institutions and funders and gold OA cannot
3. Because the money to pay for gold OA is still locked up in journal subscriptions
4. *Don't over-reach for immediate gold OA*

# "Gratis" OA vs "Libre" OA

- Gratis OA means free online access
- Libre OA means free online access plus certain further re-use rights
- *Don't over-reach for libre OA*

# Institutional repositories vs central repositories

## Institutional vs funder mandates

- Deposit institutionally, harvest centrally
- *Don't over-reach for direct central deposit*




# Parasitism? Catastrophe?

- Subscriptions pay for publication
- Authors contribute work for free
- Peers review for free

# Copyright, Embargoes

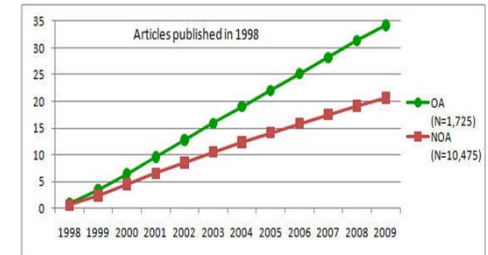
- Desirable but not necessary to retain copyright
- Immediate **green OA** self-archiving can be mandated even if authors wish to comply with publisher OA embargoes
- *Don't over-reach for copyright retention*

# The optimal green OA self-archiving mandate

- **Immediate Deposit/“Optional OA”**
- Deposit is sole means of submitting research for institutional performance review (“*Liège model*”)
- “email eprint request” button for embargoed deposits  

- *Don't over-reach for immediate-OA mandates*

# Leveraged transition

1. Institutions and funders mandate ID/OA
2. Universal green OA
3. *Subscriptions become unsustainable*
4. *Publishers downsize to peer review alone*
5. *Offload access-provision and archiving on institutional repositories*
6. *Journals convert to gold OA*
7. *Gold (much lower) OA fees paid out of institutional windfall subscription cancelation savings*



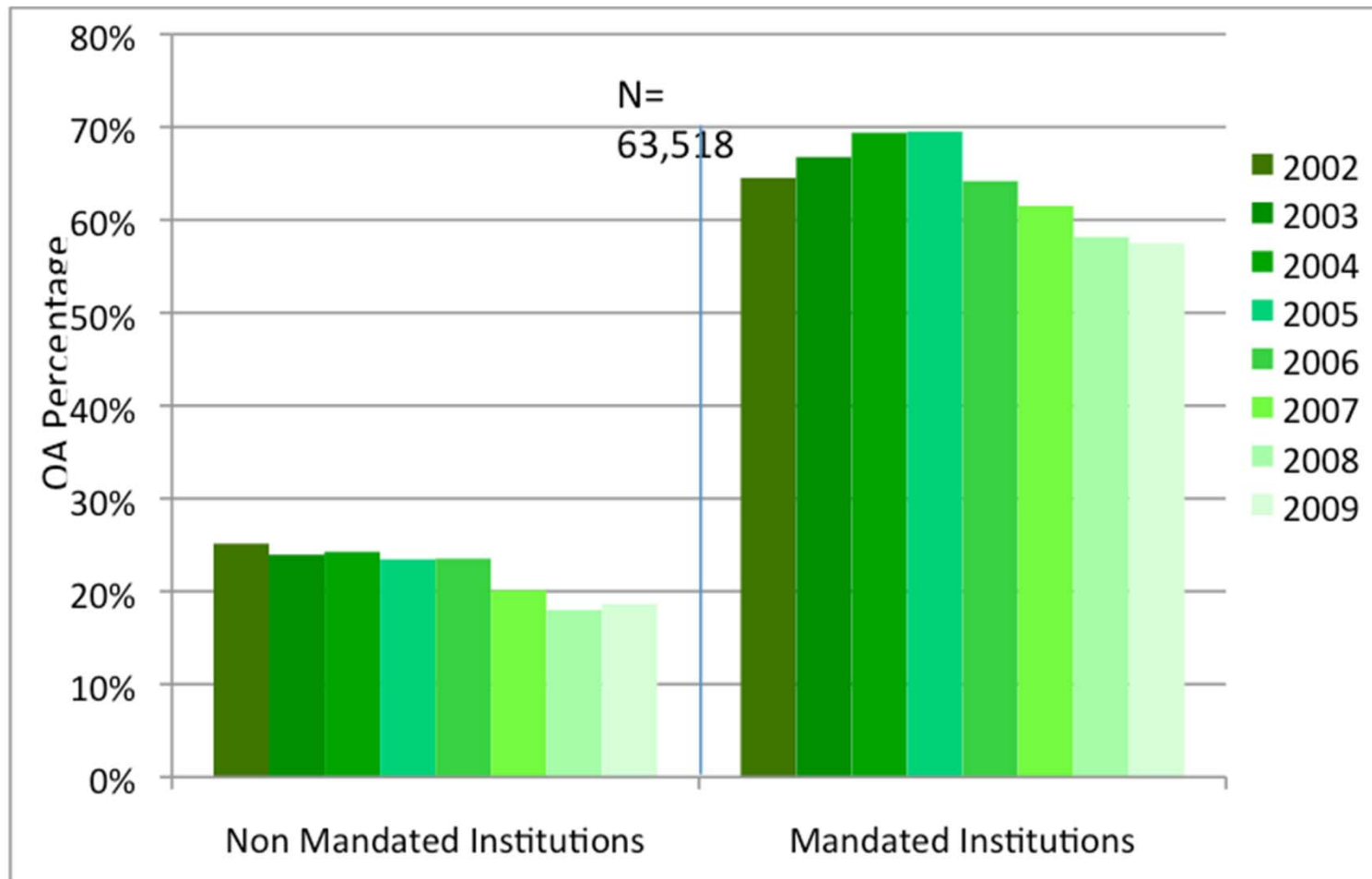
# No-fault peer review

- Instead of charging for publication
- Journals charge for each round go peer review
- “No fault”
- Rejected paper charges no longer wrapped into accepted paper fees
- Journals not tempted to lower standards for more revenue

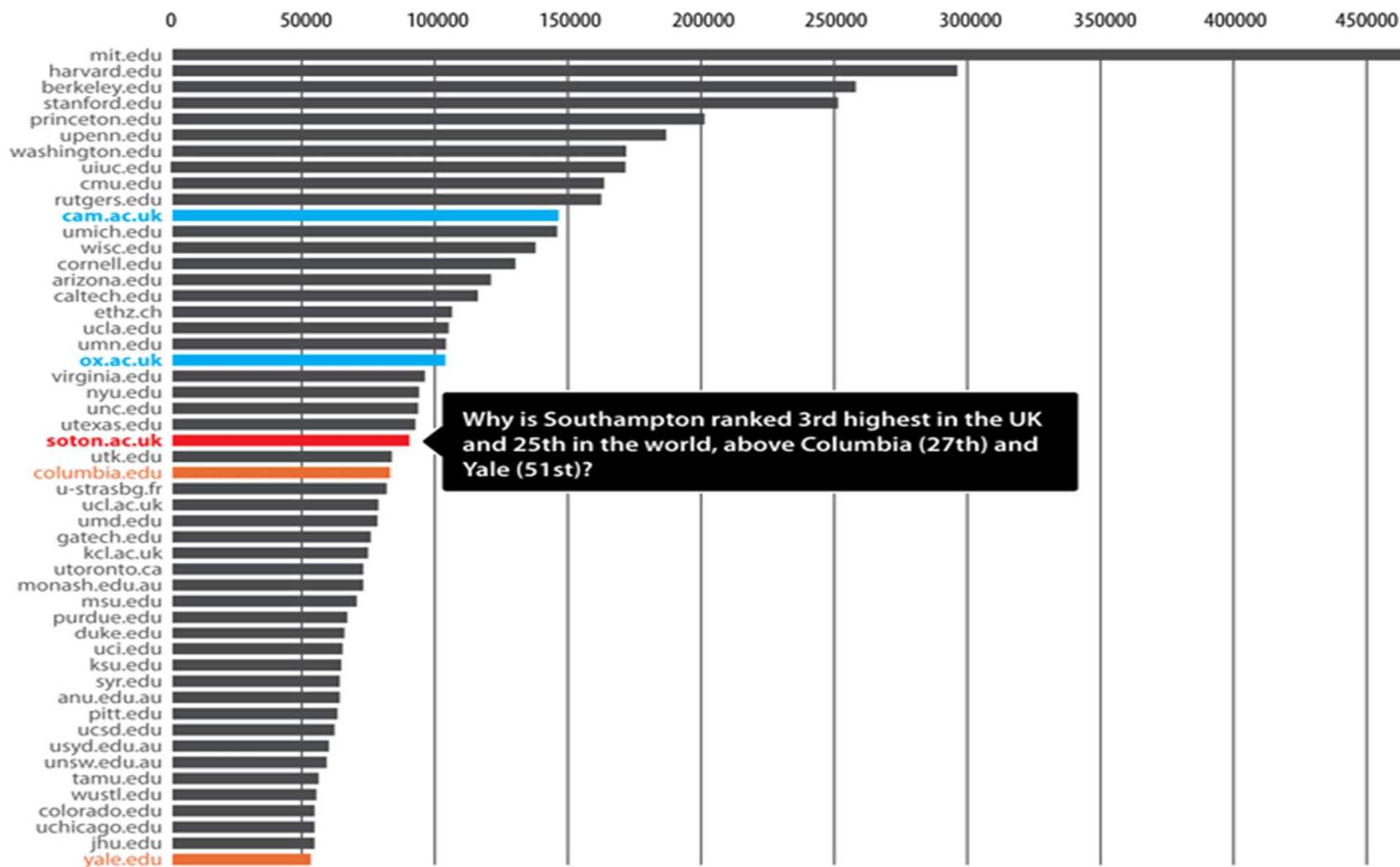
# Versions

- Author's peer-reviewed final draft has the fewest publisher restrictions on it
- *Don't over-reach for publisher's version-of-record*

**Self-selective (non-mandated) green OA levels (70%)  
vs Mandated green OA levels (20%)**



The G-factor International University Ranking measures the importance of universities as a function of the number of links to their websites from the websites of other leading international universities. Copyright Peter Hirst, 2006.

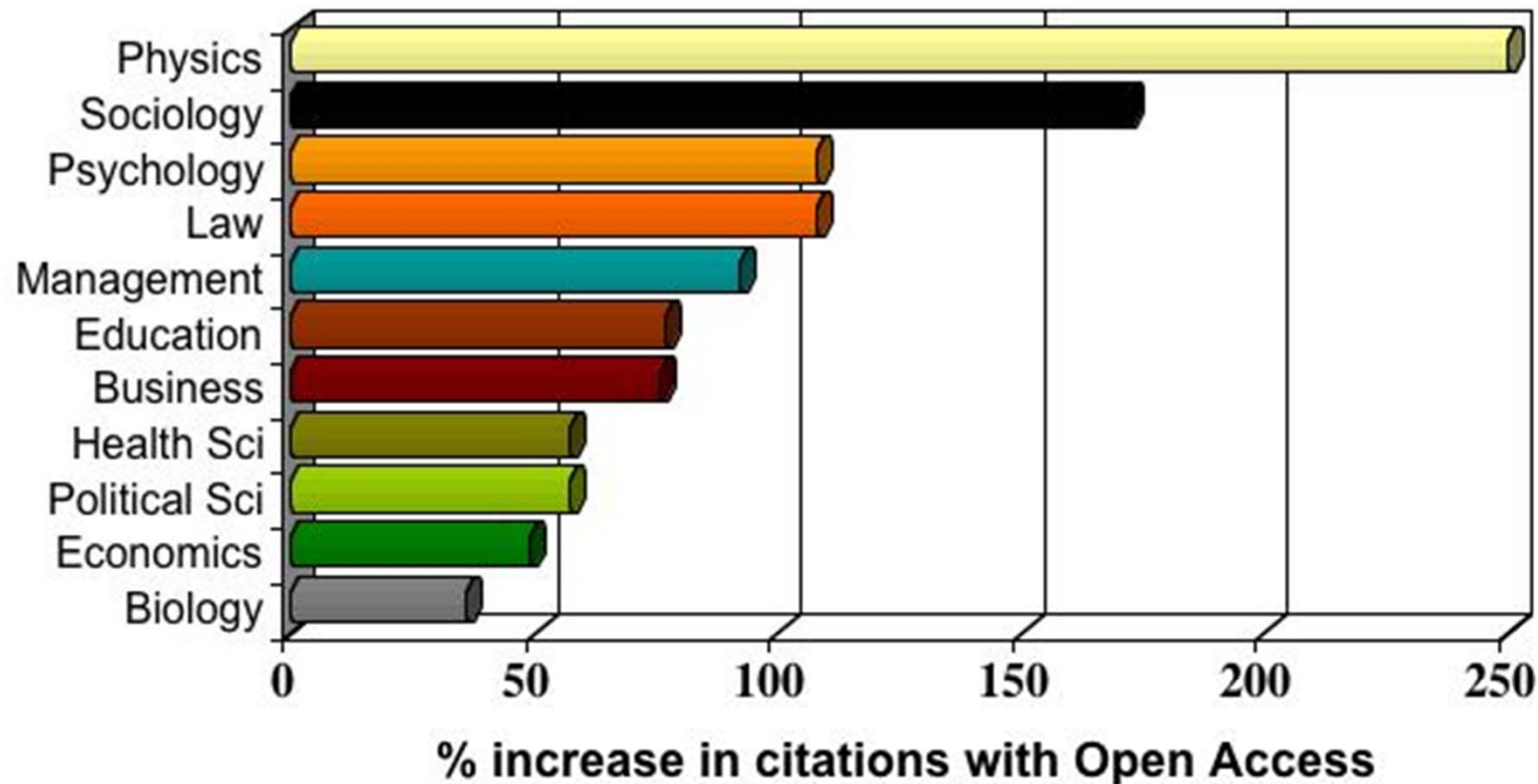


**COMPETITIVE ADVANTAGE:** The earlier you mandate Green OA, the sooner (and bigger) your university's competitive advantage: U. Southampton School of Electronics and Computer Science was the first in the world to adopt an OA self-archiving mandate.

Slides for Promoting OA Mandates and Metrics



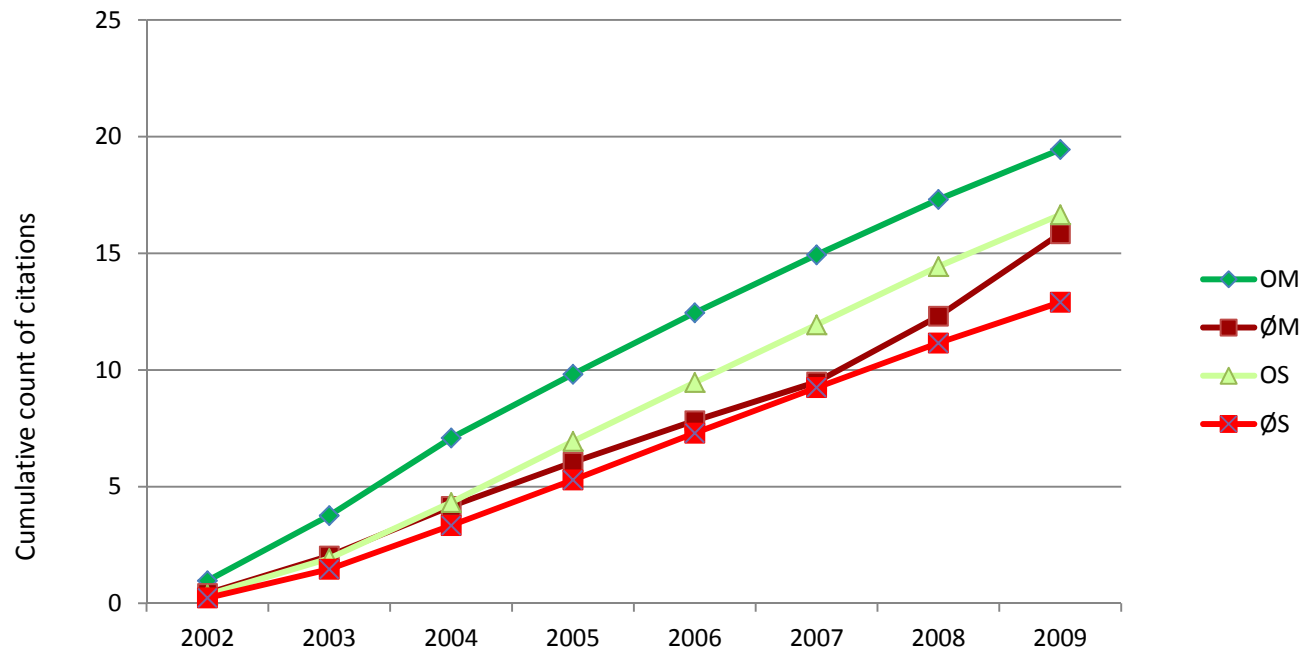
# Open Access increases citations



**Range = 36%-200%**

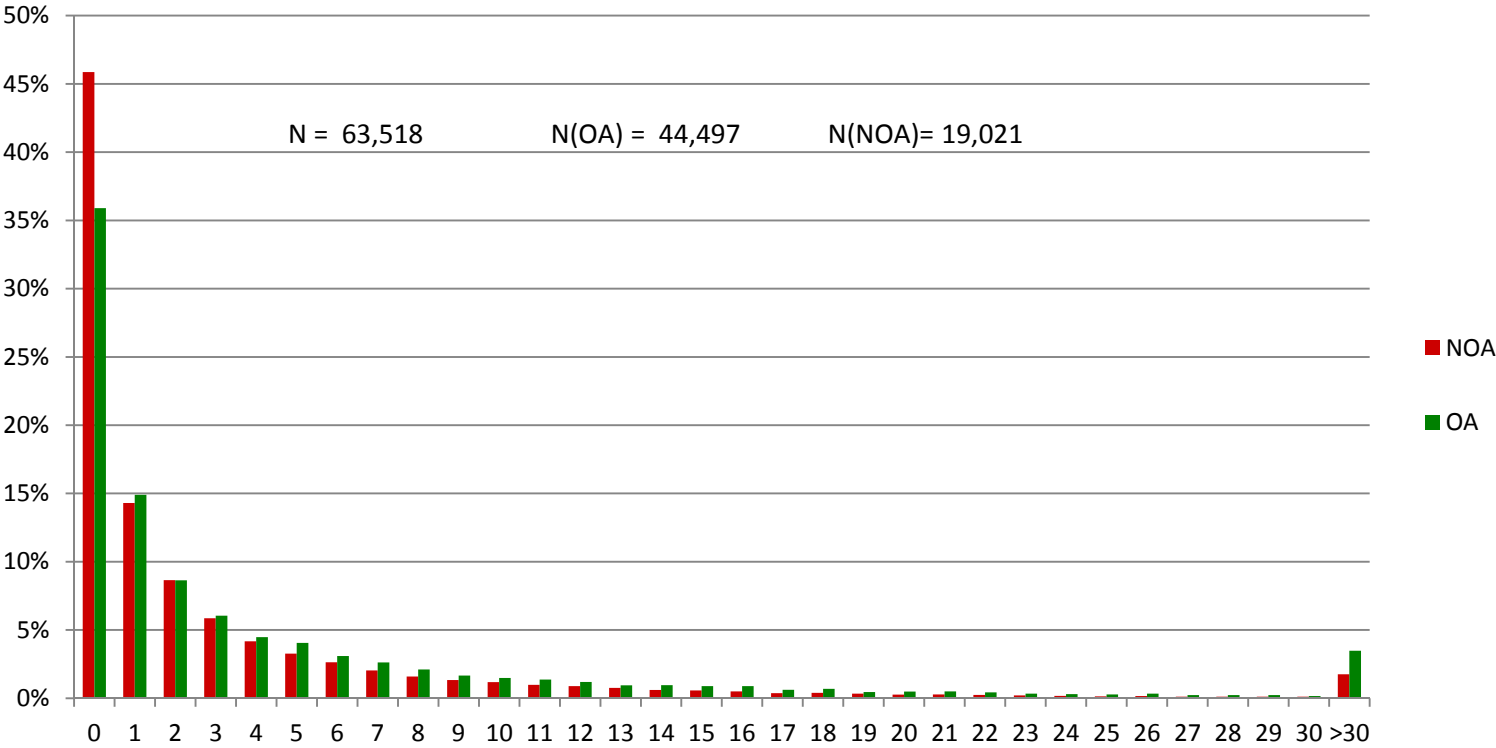
(Data: Brody & Harnad 2004; Hajjem et al. 2005)

## Cumulative number of citations per article for Mandated and Self-Selected OA vs NOA articles (articles published in 2002)



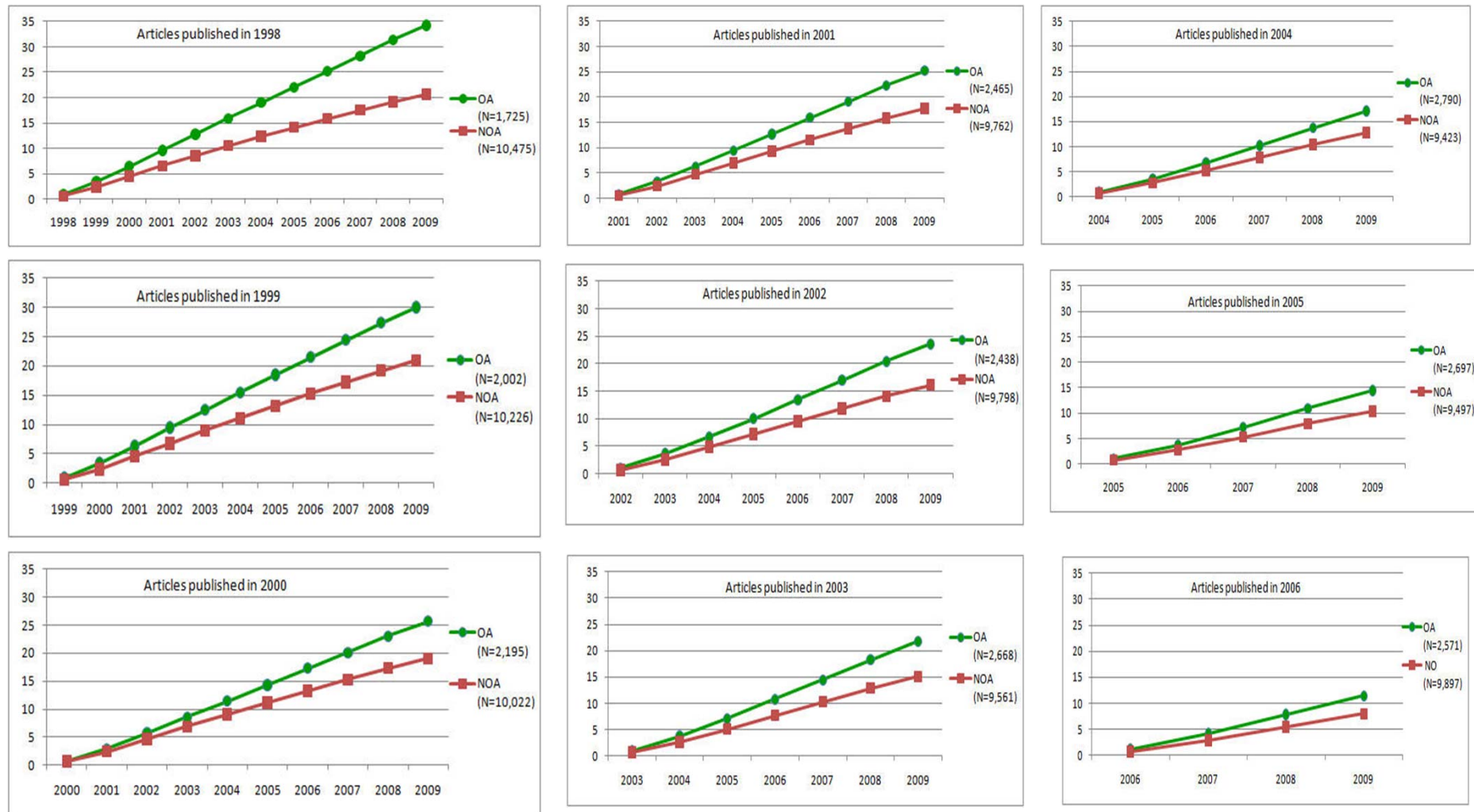
OM	N = 897
ØM	N = 493
OS	N = 1,098
ØS	N = 3,269

Separate proportions for OA vs NOA articles at each citation count



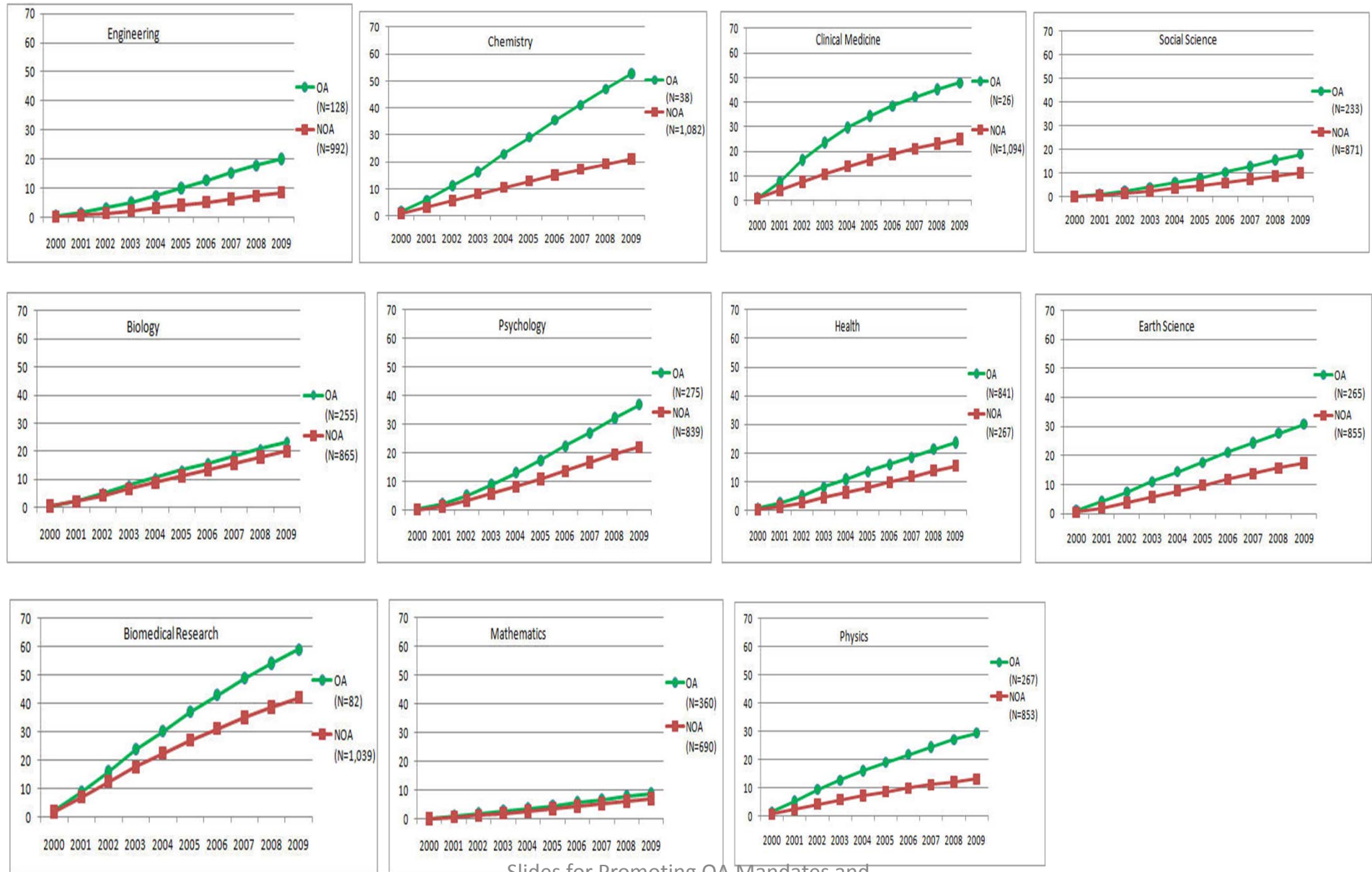
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## *Average cumulative number of citations per article as a function of article age for articles published in 1998-2009*



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# Average cumulative number of citations per article as a function of article age by field for articles published in 2000



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# Sample of candidate OA-era metrics:

- Citations (C)
- CiteRank (like Google)
- Co-citations
- Downloads (D)
- C/D Correlations
- Hub/Authority index
- Chronometrics:
  - Latency/Longevity
- Endogamy/Exogamy
- Book citation index
- Links
- Tags
- Commentaries
- Journal Impact Factor
- h-index (and variants)
- Co-authorships
- Publication counts
- Number of publishing years
- Semiometrics (latent semantic indexing, text overlap, etc.)
- Research funding
- Students
- Prizes

# ROAR & ROARMAP

Registry of Open Access Repositories

Registry of Open Access Repository Archiving Mandates

- **AGE** : age of institution's deposit mandate (in months)
- **STRENGTH**: strength of institution's deposit mandate
- **deposits** : total number of deposits in institutional repository
- **rate** : rate of deposit (number of days per year with 10-99 deposits)
- **RANK** : Webometrics rank of institution

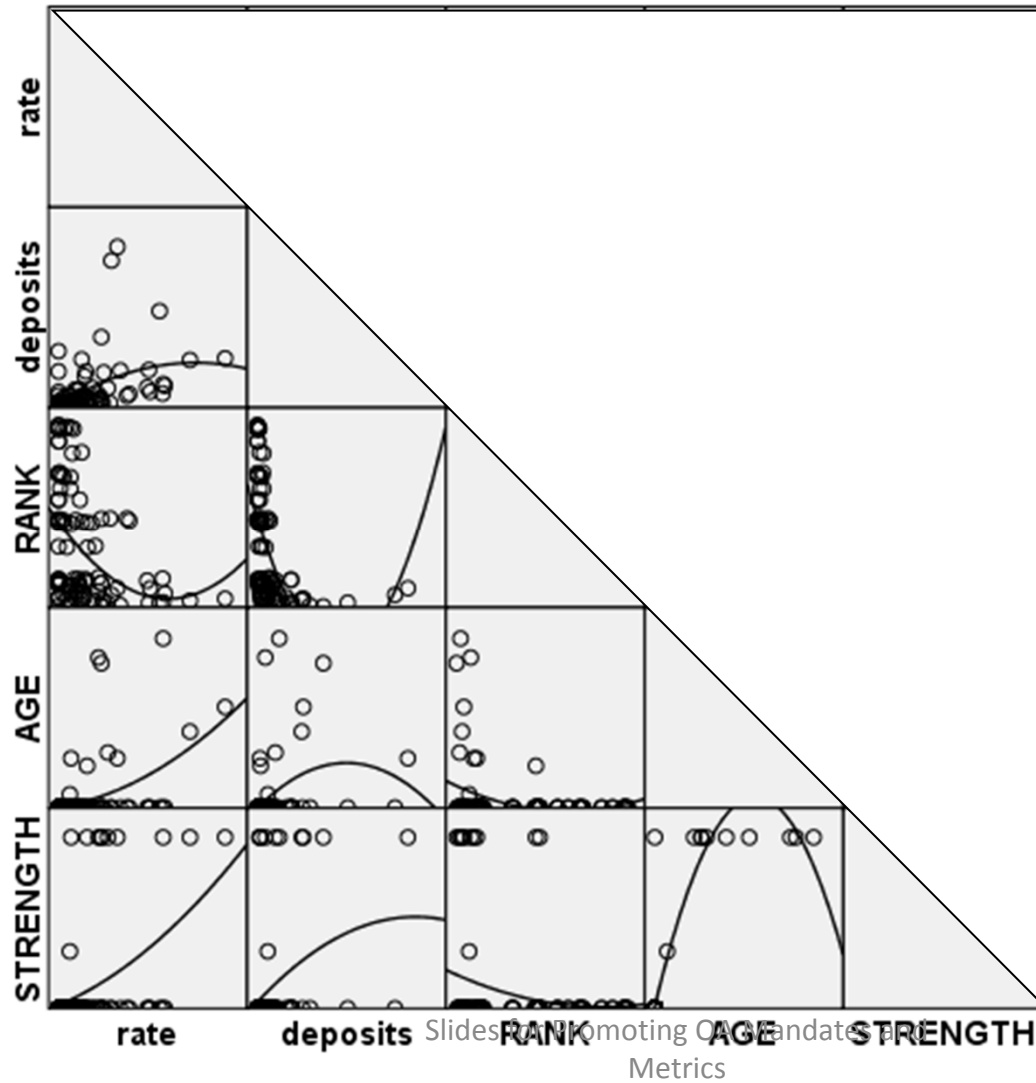
Model	Dependent variable	Predictor variables
1	rate	<b>STRENGTH<sup>+</sup></b> , <b>AGE<sup>+</sup></b>
2	deposits	<b>STRENGTH</b> , <b>AGE<sup>+</sup></b>
3	RANK	<b>STRENGTH</b> , <b>AGE<sup>+</sup></b>
4	rate	<b>STRENGTH</b> , <b>AGE</b> , <b>RANK<sup>-</sup></b>
5	deposits	<b>STRENGTH</b> , <b>AGE</b> , <b>RANK<sup>-</sup></b>

Bold: Significant correlation

+ : Positive correlation

# Scatter plot matrix :

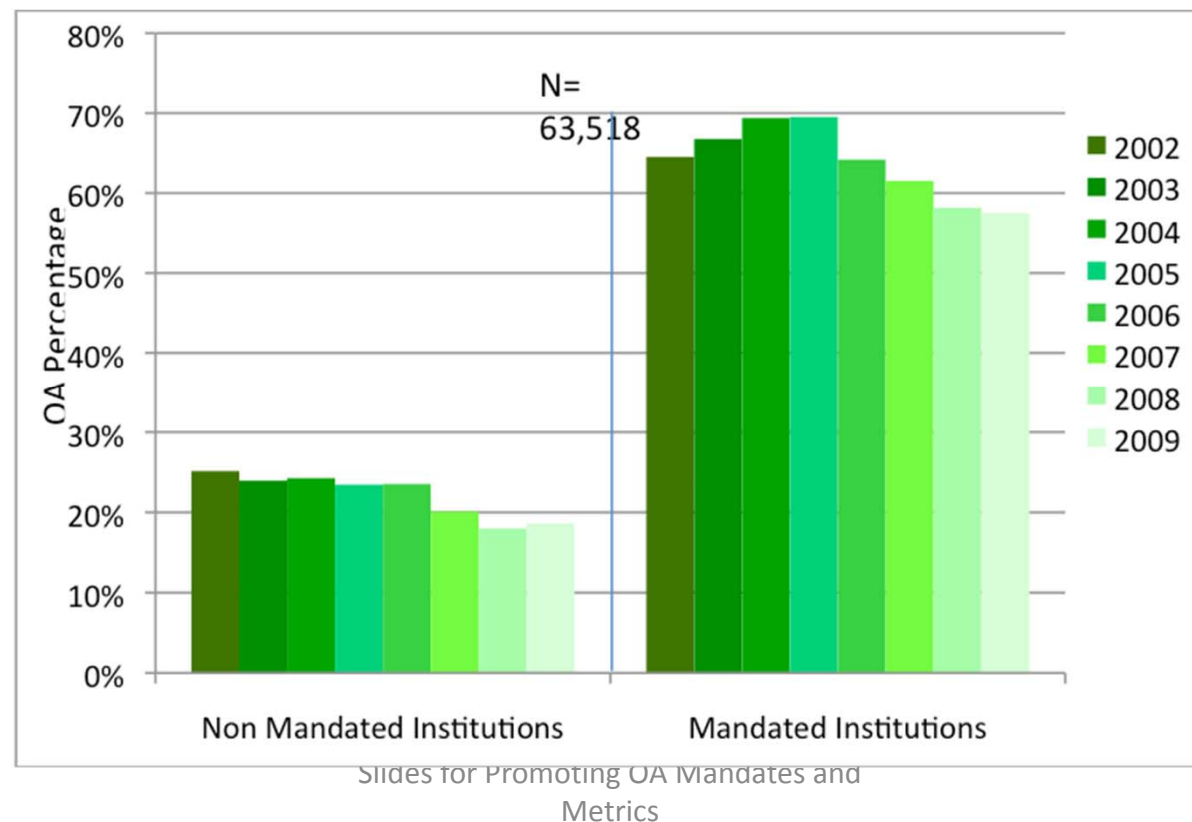
pairwise scatter plots of all variables

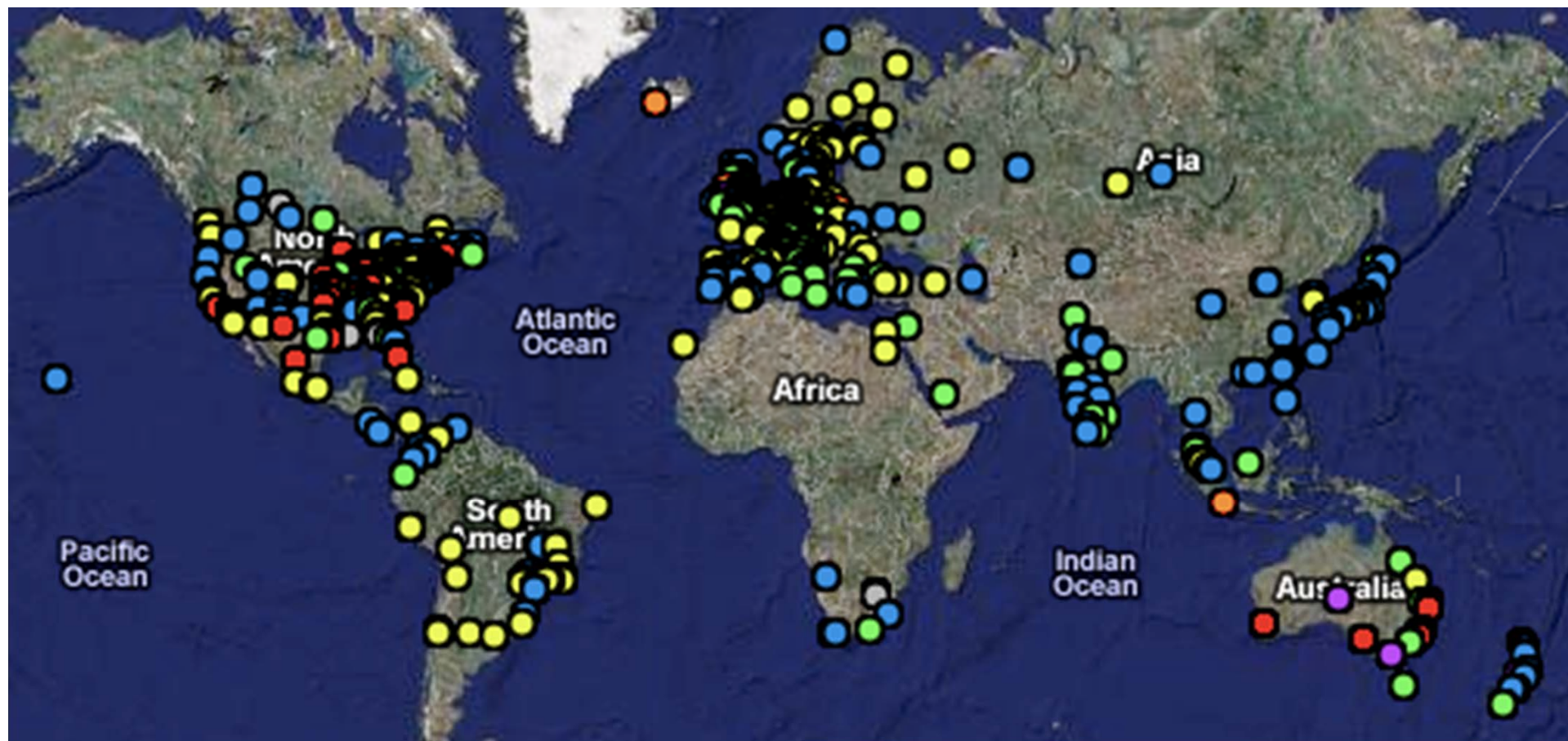




# Grasp what is within immediate reach

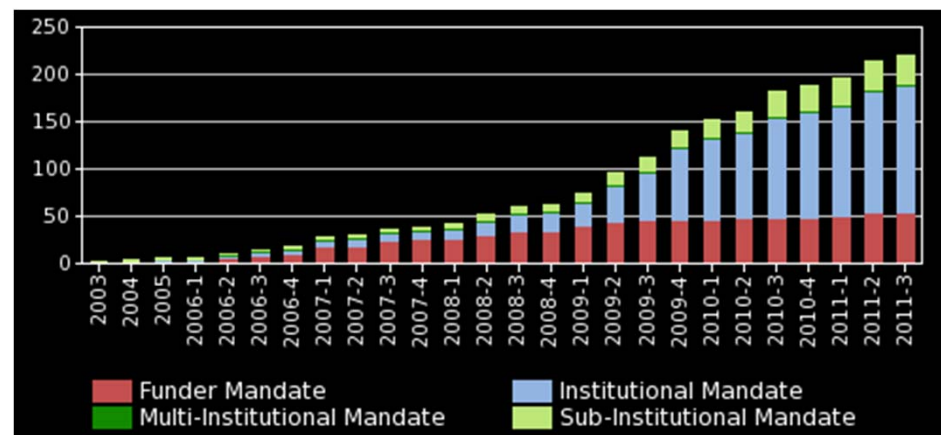
*Don't keep over-reaching and getting next to nothing for yet another decade...*






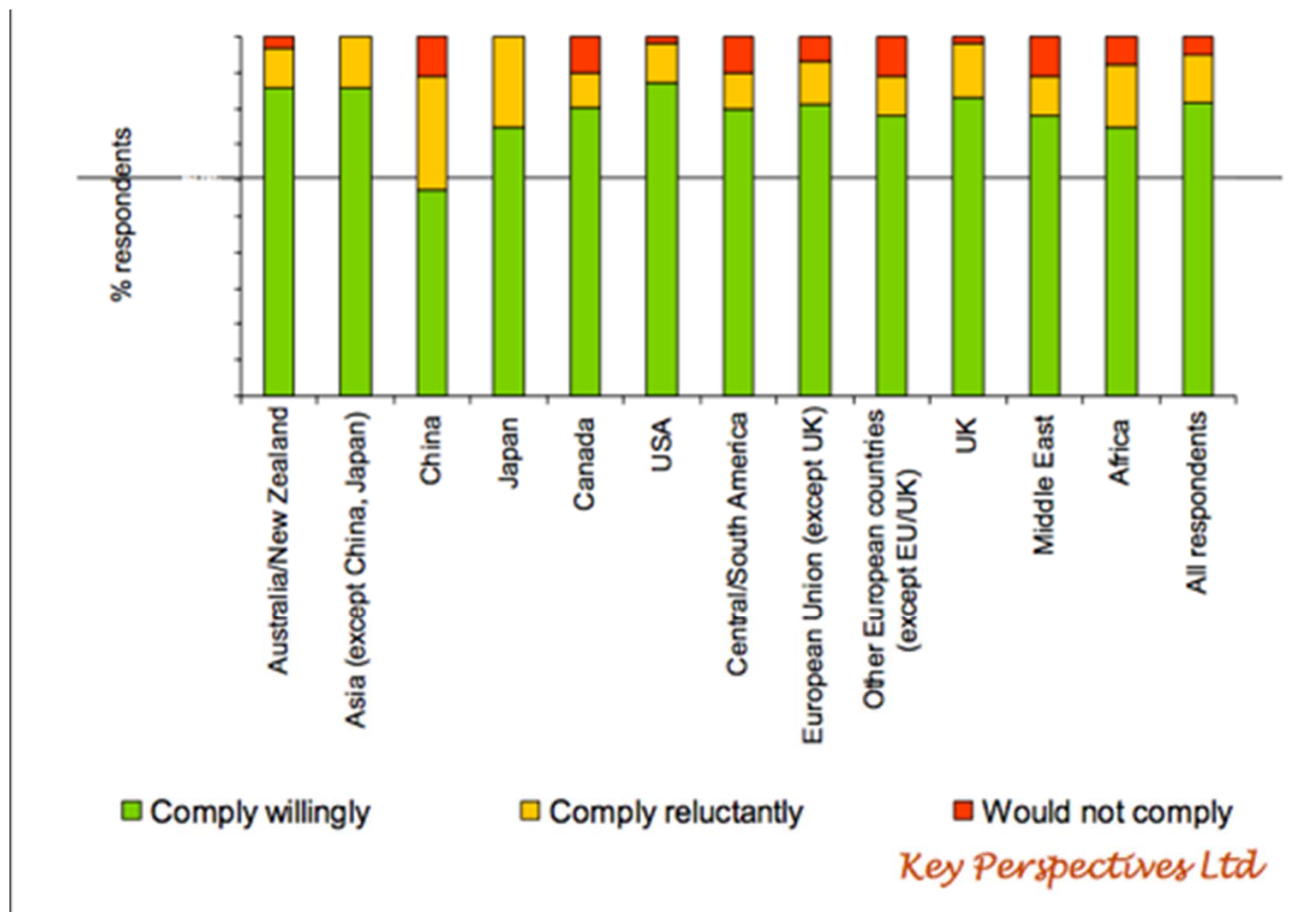
There are many repositories  
but few deposits

because deposit mandates  
are still few:



# The optimal green OA self-archiving mandate

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- *Don't over-reach for immediate-OA mandates*



Across all countries and disciplines, 95% of researchers report that they would comply with a self-archiving mandate from their funders and/or employers, and over 80% report that they would do so willingly. -- But only 15% self-archive spontaneously, if it not mandated.

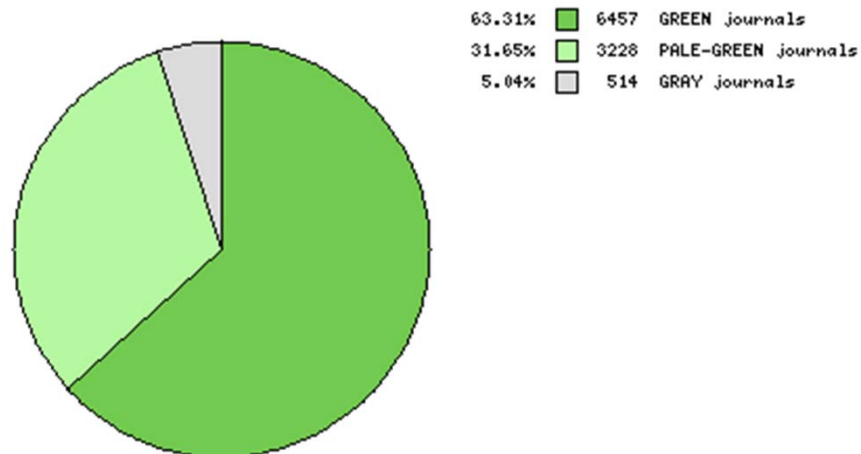
# What about copyright?

## Journal Policies - Summary Statistics So Far

**Current Journal Tally: 95% Green!**

FULL-GREEN = Postprint, PALE-GREEN = Preprint, GRAY = neither yet

Total number of publishers registered at ROMEO to date: 414



# SUMMARY:

**OA: How?** Universities and funders mandate Green OA self-archiving

**Deposit Where?** In universities' own Institutional Repositories (IRs)

**Deposit How?** A few minutes of keystrokes per paper is all that stands between the world research community and 100% OA


**Deposit What?** Author's final, revised, peer-reviewed draft ("postprint")

**Deposit When?** Immediately upon acceptance for publication

[Optimizing OA Self-Archiving Mandates: What? Where? When? Why? How?](http://openaccess.eprints.org/index.php?/archives/136-guid.html)

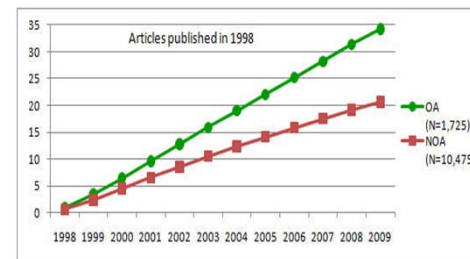
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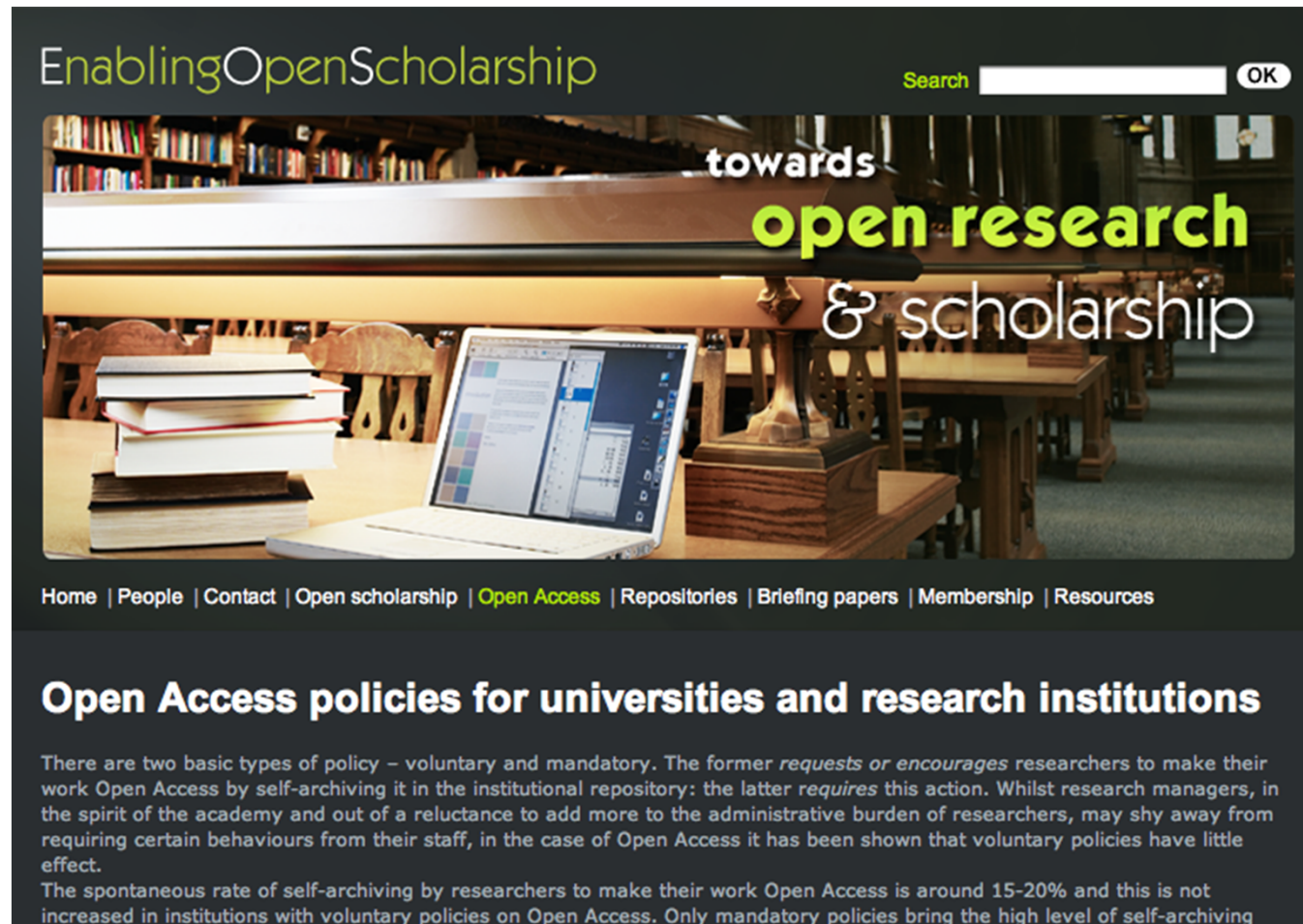
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# EnablingOpenScholarship (EOS)



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# Thank you



<http://www.openscholarship.org>